

PCT

RAW SEQUENCE LISTING DATE: 06/22/2005
PATENT APPLICATION: US/10/538,471 TIME: 10:19:58

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\06222005\J538471.raw

```
3 <110> APPLICANT: Balakireva, Larissa
      5 <120> TITLE OF INVENTION: MOLECULES INHIBITING HEPATITIS C VIRUS PROTEIN SYNTHESIS AND
METHOD FOR
      6
              SCREENING SAME
      8 <130> FILE REFERENCE: 1759.200
                                              (Pg1, 3-6)
response

moved < 2217
response

to next line
C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/538,471
C--> 11 <141> CURRENT FILING DATE: 2005-06-03
     11 <150> PRIOR APPLICATION NUMBER: PCT/FR03/03675
     12 <151> PRIOR FILING DATE: 2003-12-11
     14 <150> PRIOR APPLICATION NUMBER: FR0215718
     15 <151> PRIOR FILING DATE: 2002-12-12
     17 <160> NUMBER OF SEQ ID NOS: 16
     19 <170> SOFTWARE: PatentIn version 3.1
     21 <210> SEQ ID NO: 1
     22 <211> LENGTH: 326
     23 <212> TYPE: DNA
     24 <213> ORGANISM: Artificial Sequence
W--> 26 <220> FEATURE: <221> HCV
     27 <222> LOCATION: 40..372
     28 <223> OTHER INFORMATION: corresponds to IRES sequence of HCV
     30 <400> SEQUENCE: 1
     32 ctcccctgtg aagaactact gtcttcacgc agaaagcgtc tagccatggc gttagtatga
                                                                               60
     34 gtgtcgtgca gcctccagga cccccctcc cgggagagcc atagtggtct gcggaaccgg
                                                                              120
     36 tgagtacacc ggaattgcca ggatgaccgg gtcctttctt ggatcaaccc gctcaatgcc
                                                                              180
     38 tqqaqatttq qqcqtqcccc cqcqaqactq ctaqccqaqt aqtqttqqqt cqcqaaaqqc
                                                                              240
     40 cttgtggtac tgcctgatag ggtgcttgcg agtgccccgg gaggtctcgt agaccgtgca
                                                                              300
     42 tcatgagcac aaatcctaaa gaaaaa
                                                                              326
     45 <210> SEQ ID NO: 2
     46 <211> LENGTH: 80
                                                same
     47 <212> TYPE: DNA
     48 <213> ORGANISM: Artificial Sequence
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     51 <222> LOCATION: 40...119
     52 <223> OTHER INFORMATION: corresponds to a portion (region II) of HCV IRES sequence
     54 <400> SEQUENCE: 2
     56 ctcccctgtg aggaactact gtcttcacgc agaaagcgtc tagccatggc gttagtatga
                                                                               60
     58 gtgttgtgca gcctccagga
                                                                               80
     61 <210> SEQ ID NO: 3
     62 <211> LENGTH: 37
     63 <212> TYPE: DNA
    64 <213> ORGANISM: Artificial Sequence
W--> 66 <220> FEATURE:( <221> HCV
    67 <222> LOCATION: 56...92
     68 <223> OTHER INFORMATION: corresponds to a portion (consensus sequence) of HCV IRES
```

sequence

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```
70 <400> SEQUENCE: 3
                                                                            37
   72 tactgtcttc acgcagaaag cgtctagcca tggcgtt
   75 <210> SEQ ID NO: 4
   76 <211> LENGTH: 814
   77 <212> TYPE: PRT
                                              Same
   78 <213> ORGANISM: Artificial Sequence
--> 80 <220> FEATURE: <221> p116
   81 <222> LOCATION: 1..814
   82 <223> OTHER INFORMATION: corresponds to p116 subunit of eIF3
   84 <400> SEQUENCE: 4
   86 Met Gln Asp Ala Glu Asn Val Ala Val Pro Glu Ala Ala Glu Glu Arg
   90 Ala Glu Pro Gly Gln Gln Pro Ala Ala Glu Pro Pro Pro Ala Glu
   94 Gly Leu Leu Arg Pro Ala Gly Pro Gly Ala Pro Glu Ala Ala Gly Thr
   98 Glu Ala Ser Ser Glu Glu Val Gly Ile Ala Glu Ala Gly Pro Glu Pro
   102 Glu Val Arg Thr Glu Pro Ala Ala Glu Ala Glu Ala Ser Gly Pro
                           70
   106 Ser Glu Ser Pro Ser Pro Pro Ala Ala Glu Glu Leu Pro Gly Ser His
                       85
                                           90
   110 Ala Glu Pro Pro Val Pro Ala Gln Gly Glu Ala Pro Gly Glu Gln Ala
                   100
                                       105
  · 114 Arg Asp Glu Arg Ser Asp Ser Arg Ala Gln Ala Val Ser Glu Asp Ala
   115
              115
                                   120
                                                       125
   118 Gly Gly Asn Glu Gly Arg Ala Ala Glu Ala Glu Pro Arg Ala Leu Glu
                               135
   122 Asn Gly Asp Ala Asp Glu Pro Ser Phe Ser Asp Pro Glu Asp Phe Val
                           150
                                               155
   126 Asp Asp Val Ser Glu Glu Glu Leu Leu Gly Asp Val Leu Lys Asp Arg
                                           170
   130 Pro Gln Glu Ala Asp Gly Ile Asp Ser Val Ile Val Val Asp Asn Val
   131
                                       185
                   180
   134 Pro Gln Val Gly Pro Asp Arg Leu Glu Lys Leu Lys Asn Val Ile His
                                   200
   138 Lys Ile Phe Ser Lys Phe Gly Lys Ile Thr Asn Asp Phe Tyr Pro Glu
           210
                               215
                                                   220
   142 Glu Asp Gly Lys Thr Lys Gly Tyr Ile Phe Leu Glu Tyr Ala Ser Pro
                           230
   146 Ala His Ala Val Asp Ala Val Lys Asn Ala Asp Gly Tyr Lys Leu Asp
                                           250
                       245
   150 Lys Gln His Thr Phe Arg Val Asn Leu Phe Thr Asp Phe Asp Lys Tyr
                                       265
   154 Met Thr Ile Ser Asp Glu Trp Asp Ile Pro Glu Lys Gln Pro Phe Lys
                                   280
   158 Asp Leu Gly Asn Leu Arg Tyr Trp Leu Glu Glu Ala Glu Cys Arg Asp
                               295
```

162 Gln Tyr Ser Val Ile Phe Glu Ser Gly Asp Arg Thr Ser Ile Phe Trp

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162	305					310					315					320
		N an	Val	Tvc	7 an		W-1	602	Tla	C111		7~~	ת ו ת	Arg	Trn	
	ASII	Asp	vaı	пåр	325	PIO	vai	ser	116	330	GIU	Arg	AIA	Arg	335	IIII
167	a1	ml	m	77-7			0	D	T		ml	m	T	77-		Dha
	GIU	inr	Tyr		arg	Trp	ser	Pro	-	GIY	Thr	Tyr	Leu	Ala	Thr	Pne
171	1		_	340			_	_	345			_	_,	350		
	His	GIn	_	Gly	He	Ala	Leu	_	GIY	GLY	GIu	Lys		Lys	GIn	lle
175			355			_	_	360	_		_		365			
178	Gln	Arg	Phe	Ser	His	Gln	_	Val	Gln	Leu	Ile	Asp	Phe	Ser	Pro	Cys
179		370					375					380				
182	Glu	Arg	Tyr	Leu	Val	Thr	Phe	Ser	Pro	Leu		Asp	Thr	Gln	Asp	Asp
	385					390					395					400
186	Pro	Gln	Ala	Ile	Ile	Ile	Trp	Asp	Ile	Leu	Thr	Gly	His	Lys	Lys	Arg
187					405					410					415	
190	Gly	Phe	His	Cys	Glu	Ser	Ser	Ala	His	Trp	Pro	Ile	Phe	Lys	Trp	Ser
191				420					425					430		
194	His	Asp	Gly	Lys	Phe	Phe	Ala	Arg	Met	Thr	Leu	Asp	Thr	Leu	Ser	Ile
195			435					440					445			
198	Tyr	Glu	Thr	Pro	Ser	Met	Gly	Leu	Leu	Asp	Lys	Lys	Ser	Leu	Lys	Ile
199	_	450					455			_	_	460			-	
202	Ser	Gly	Ile	Lys	Asp	Phe	Ser	Trp	Ser	Pro	Gly	Gly	Asn	Ile	Ile	Ala
	465	-		•	-	470		-			475	•				480
		Trp	Val	Pro	Glu	Asp	Lvs	Asp	Ile	Pro	Ala	Arq	Val	Thr	Leu	Met
207		-			485			_		490					495	
	Gln	Leu	Pro	Thr		Gln	Glu	Ile	Ara		Ara	Asn	Leu	Phe		Val
211	•			500	5				505		5			510		
	Val	Asp	Cvs		Leu	His	Trp	Gln		Asn	Glv	Asp	Tvr	Leu	Cvs	Val
215			515	-1-				520	-1-		1	<u>F</u>	525		-1-	
	Lvs	Val		Ara	Thr	Pro	Lvs		Thr	Gln	Glv	Val		Thr	Asn	Phe
219		530		5			535	- 1			0-1	540				
	Glu		Phe	Ara	Met	Ara		Lvs	Gln	Val	Pro		Asp	Val	Val	Glu
	545			9		550		-70			555					560
		Lvs	Glu	Thr	Tle		Δla	Phe	Δla	Trp		Pro	Asn	Gly	Ser	
227		- 175	014		565					570	014			017	575	-75
	Dhe	Δla	Val	T.e.ii		Glv	Glu	Δla	Pro		Tle	Ser	Val	Ser		ጥህዮ
231	rne	AIG	vai	580	1113	Gry	GIU	AIG	585	nr 9	116	JCI	VUI	590	TIIC	- y -
	ui c	v-1	Lva		λan	Gl v	Lazo	Tla		Lou	Tla	Larc	Mot	Phe	Acn	Lare
235	urs	vaı	595	ASII	ASII	GIY	пуъ	600	Giu	пец	116	цуз	605	FIIC	Asp	цуз
	Cln	Cln		7 00	πh∽	T1.	Dho		602	Dro	Cln	C1.		Dho	17-3	1751
	GIII		AIA	ASII	1111	TTE		пр	Ser	PIO	GIII	_	GIII	Phe	vai	vai
239	.	610	~ 1	.	3	0	615	3	01		T	620	Dl	**- 7	3	ml
		Ата	GIY	Leu	Arg		мет	Asn	GIA	Ala		Ala	Pne	Val	Asp	
	625	_				630	_				635	_			_	640
	Ser	Asp	Cys	Thr		Met	Asn	He	Ala		His	Tyr	Met	Ala		Asp
247					645					650	_			_	655	_
	Val	Glu	Trp	-	Pro	Thr	Gly	Arg	-	Val	Val	Thr	Ser	Val	Ser	Trp
251				660					665					670		
	Trp	Ser		Lys	Val	Asp	Asn	Ala	Tyr	Trp	Leu	Trp		Phe	Gln	Gly
255			675					680					685			
	Arg	Leu	Leu	Gln	Lys	Asn		Lys	Asp	Arg	Phe	_	Gln	Leu	Leu	\mathtt{Trp}
259		690					695					700				

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                    PATENT APPLICATION: US/10/538,471
                    Input Set : A:\PTO.RJ.txt
                    Output Set: N:\CRF4\06222005\J538471.raw
     262 Arg Pro Arg Pro Pro Thr Leu Leu Ser Gln Glu Gln Ile Lys Gln Ile
     263 705 · 710
                                                715
     266 Lys Lys Asp Leu Lys Lys Tyr Ser Lys Ile Phe Glu Gln Lys Asp Arg
                        725
                                            730
     270 Leu Ser Gln Ser Lys Ala Ser Lys Glu Leu Val Glu Arg Arg Arg Thr
                                        745
     274 Met Met Glu Asp Phe Arg Lys Tyr Arg Lys Met Ala Gln Glu Leu Tyr
                                    760
     278 Met Glu Gln Lys Asn Glu Arg Leu Glu Leu Arg Gly Gly Val Asp Thr
                                775
     282 Asp Glu Leu Asp Ser Asn Val Asp Asp Trp Glu Glu Glu Thr Ile Glu
                            790
                                                795
     286 Phe Phe Val Thr Glu Glu Ile Ile Pro Leu Gly Asn Gln Glu
                        805
     290 <210> SEQ ID NO: 5
     291 <211> LENGTH: 106
     292 <212> TYPE: PRT
                                                 - Dame
     293 <213> ORGANISM: Artificial Sequence
W--> 295 <220> FEATURE: <221> p116
     296 <222> LOCATION: 175..279
     297 <223> OTHER INFORMATION: corresponds to a portion (RRM) of eIF3 p116 subunit
     299 <400> SEQUENCE: 5
     301 Met Asp Arg Pro Gln Glu Ala Asp Gly Ile Asp Ser Val Ile Val Val
     305 Asp Asn Val Pro Gln Val Gly Pro Asp Arg Leu Glu Lys Leu Lys Asn
                    20
                                        25
     309 Val Ile His Lys Ile Phe Ser Lys Phe Gly Lys Ile Thr Asn Asp Phe
     313 Tyr Pro Glu Glu Asp Gly Lys Thr Lys Gly Tyr Ile Phe Leu Glu Tyr
                                55
     317 Ala Ser Pro Ala His Ala Val Asp Ala Val Lys Asn Ala Asp Gly Tyr
     321 Lys Leu Asp Lys Gln His Thr Phe Arg Val Asn Leu Phe Thr Asp Phe
                        85
     325 Asp Lys Tyr Met Thr Ile Ser Asp Glu Trp
                    100
     329 <210> SEQ ID NO: 6
     330 <211> LENGTH: 33
                                                 _ pame
     331 <212> TYPE: DNA
     332 <213> ORGANISM: Artificial Sequence
W--> 334 <220> FEATURE: <221> primer_bind > 5
     335 <222> LOCATION: 1..33
     336 <223> OTHER INFORMATION: HCV RRM 5' primer (RRMfwd)
     338 <400> SEQUENCE: 6
                                                                              33
     340 catatggatc ggccccagga agcagatgga atc
     343 <210> SEQ ID NO: 7
     344 <211> LENGTH: 33
     345 <212> TYPE: DNA
     346 <213> ORGANISM: Artificial Sequence
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PATENT APPLICATION: US/10/538,471
                     Input Set : A:\PTO.RJ.txt
                    Output Set: N:\CRF4\06222005\J538471.raw
W--> 348 <220> FEATURE: (221> primer bind) ( Same
     349 <222> LOCATION: 1..33
     350 <223> OTHER INFORMATION: HCV RRM 3' primer (RRMrev)
     352 <400> SEQUENCE: 7
                                                                              33
     354 gtgctcgagc cactcgtcac tgatcgtcat ata
     357 <210> SEQ ID NO: 8
     358 <211> LENGTH: 29
     359 <212> TYPE: DNA
     360 <213> ORGANISM: Artificial Sequence
W--> 362 <220> FEATURE: <221> primer_bind > 6
     363 <222> LOCATION: 1..29
     364 <223> OTHER INFORMATION: HCV IRES 5' primer (IRESfwd)
     366 <400> SEOUENCE: 8
                                                                              29
     368 accgctagcc tcccctgtga ggaactact
     371 <210> SEQ ID NO: 9
     372 <211> LENGTH: 46
     373 <212> TYPE: DNA
     374 <213> ORGANISM: Artificial Sequence
376 <220> FEATURE: <221> primer bind
W--> 376 <220> FEATURE: <221> primer_bind
     377 <222> LOCATION: 1-46
     378 <223> OTHER INFORMATION: HCV IRES 3' primer (IRESrev)
     380 <400> SEQUENCE: 9
     382 gaaagctttt ttctttgagg tttaggattt gtgctcatga tgcacg
                                                                              46
     385 <210> SEQ ID NO: 10
     386 <211> LENGTH: 95
     387 <212> TYPE: DNA
     388 <213> ORGANISM: Artificial Sequence
W--> 390 <220> FEATURE: <221> primer bind )
     391 <222> LOCATION: 1 95
     392 <223> OTHER INFORMATION: primer IIIabcfwd which corresponds to T7 polymerase promoter
+ 139-215 of
     393
              HCV (regions IIIa-IIIb)
     395 <400> SEQUENCE: 10
     397 taatacgact cactataggg tagtggtctg cggaaccggt gagtacaccg gaattgccag
                                                                              60
     399 gacgaccggg tcctttcttg gataaacccg ctcaa
                                                                              95
     402 <210> SEQ ID NO: 11
     403 <211> LENGTH: 60
     404 <212> TYPE: DNA
     405 <213> ORGANISM: Artificial Sequence
W--> 407 <220> FEATURE: 221> primer bind >
     408 <222> LOCATION: 1..60
     409 <223> OTHER INFORMATION: primer IIIabcrev which corresponds to 193-252 of HCV
(regions IIIb-IIIc)
     413 <400> SEQUENCE: 11
     415 tagcagtete gegggggeae geceaaatet ceaggeattg agegggttga tecaagaaag
                                                                              60
     418 <210> SEQ ID NO: 12
     419 <211> LENGTH: 20
     420 <212> TYPE: DNA
W--> 423 <220> FEATURE: <221> primer_bind
     424 <222> LOCATION: 1..20
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RAW SEQUENCE LISTING

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 06/22/2005 PATENT APPLICATION: US/10/538,471 TIME: 10:19:59

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\06222005\J538471.raw

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:10; Line(s) 392

4-72.

VERIFICATION SUMMARY DATE: 06/22/2005 PATENT APPLICATION: US/10/538,471 TIME: 10:19:59

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\06222005\J538471.raw

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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:26 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:50 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:66 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:80 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:295 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:334 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:348 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:362 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:376 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:390 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:407 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:423 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:437 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:453 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:467 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
L:481 M:256 W: Invalid Numeric Header Field, <220> has non-blank data
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